

TEST REPORT

REPORT NUMBER: B18W50279-EMC

ON

Type of Equipment: LTE CAT-M1/NB-IOT/GPRS/EDGE/GNSS MODULE

Type of Designation: SIM7000G

Manufacturer: Shanghai SIMCom Wireless Solutions Ltd.

ACCORDING TO

**Subpart B, PART 15, RADIO FREQUENCY DEVICES , August 24, 2018
ICE-003, Issue 5 ,August 2012**

Chongqing Academy of Information and Communications

Month date, year

August, 26, 2018

Signature



Zhang Yan

Director

Note:

The test results in this test report relate only to the devices specified in this report. This report shall not be reproduced except in full without the written approval of Chongqing Academy of Information and Communications Technology.

Chongqing Academy of Information and Communications Technology

Report No.: B18W00279-EMC

FCC ID: 2AJYU-SIM7000G

Report Date: 2018-08-26

Test Firm Name: Chongqing Academy of Information and
Communications Technology

FCC Registration Number: CN1239

Statement

The measurements shown in this report were made in accordance with the procedures described on test pages. All reported tests were carried out on a sample equipment to demonstrate limited compliance with FCC CFR 47 Part 15 and ICE-003 Issue 5. The sample tested was found to comply with the requirements defined in the applied rules.

CONTENTS

1 GENERAL INFORMATION	4
1.1 NOTES	4
1.2 TESTERS	5
1.3 TESTING LABORATORY INFORMATION	6
1.4 DETAILS OF APPLICANT OR MANUFACTURER	7
2 TEST ITEM	8
2.1 GENERAL INFORMATION.....	8
2.2 OUTLINE OF EUT	8
2.3 MODIFICATIONS INCORPORATED IN EUT.....	8
2.4 EQUIPMENT CONFIGURATION	8
2.5 OTHER INFORMATION	8
3 SUMMARY OF TEST RESULTS.....	9
4 TEST RESULTS	10
4.1 RADIATED EMISSION	10
ANNEX A EXTERNAL PHOTOS.....	14
ANNEX B INTERNAL PHOTOS	14
ANNEX C DEVIATIONS FROM PRESCRIBED TEST METHODS	14

1 General Information

1.1 Notes

All reported tests were carried out on a sample equipment to demonstrate limited compliance with FCC CFR 47 Part15 and ICE-003 Issue 5.

The test results of this test report relate exclusively to the item(s) tested as specified in section 2.

The following deviation from, additions to, or exclusions from the test specifications have been made. See Annex C.

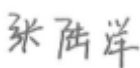
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1.2 Testers

Name: Bai Qingqing
Position: Engineer
Department: Department of EMC test
Date: 2018-08-26
Signature: 

Editor of this test report:

Name: Zhang Luyang
Position: Engineer
Department: Department of EMC test
Date: 2018-08-26
Signature: 

Technical responsibility for area of testing:

Name: Zhang Yan
Position: Manager
Department: Director of the laboratory
Date: 2018-08-26
Signature: 

1.3 Testing Laboratory information

1.3.1 Location

Name: Chongqing Academy of Information and Communications
Technology

Address: No. 8, Yuma Road, Chayuan New City, Nan'an District
Chongqing
P. R. CHINA, 401336

Tel: +86 23 88069965

Fax: +86 23 88608777

Email: shouli@cqeips.com

1.3.2 Details of accreditation status

Accredited by: --

Registration number: --

Standard: --

1.3.3 Test location, where different from section 1.3.1

Name: -----

Address: -----

1.4 Details of applicant or manufacturer

1.4.1 Applicant

Name: Shanghai SIMCom Wireless Solutions Ltd.

Address: Bldg. B, SIM Technology Bldg., No.633, Jinzhong Rd,
Changning Dist., Shanghai, P.R.China

Country: China

Telephone: +86-21-31575182

Fax: --

Contact: Haisheng zeng

Telephone: +86-21-31575182

Email: liyongsheng@simcom.com

1.4.2 Manufacturer (if different from applicant in section 1.4.1)

Name: --

Address: --

City: --

Country: --

1.4.3 Manufactory (if different from applicant in section 1.4.1)

Name: --

Address: --

City: --

Country: --

2 Test Item

2.1 General Information

Manufacturer: Shanghai SIMCom Wireless Solutions Ltd.
Name: LTE CAT-M1/NB-IoT/GPRS/EDGE/GNSS MODULE
Model Number: SIM7000G
Serial Number: 869951030004190
Production Status: Product
Receipt date of test item: 2018-07-03

2.2 Outline of EUT

The EUT, SIM7000G is a model supporting GSM 800/PCS 1900/NB-IoT Band2/5/12/13/17/26 and CAT-M Band2/4/5/12/13/26.

2.3 Modifications Incorporated in EUT

The EUT has not been modified from what is described by the brand name and unique type identification stated above.

2.4 Equipment Configuration

Equipment configuration list:

Item	Generic Description	Manufacturer	Type	Serial No.	Remarks
A	Adaptor	Someting High Electric (Xiamen) Company	P-050B-050200	--	None

2.5 Other Information

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3 Summary of Test Results

A brief summary of the tests carried out is shown as following.

Configuration1		
Specification Clause	Name of Test	Result
15.109(a)/ ICE-003 Issue 5 §6	Radiated Emission	Pass

Test equipment Used:						
Number	Description	Manufacturer	Model Number	Serial Number	Cal Due	State
1	EMI Test Receiver	R/S	ESU26	100367	2019-03-01	Normal
2	Ultra Broadband Antenna	R/S	VULB 9163	vulb9163—544	2018-12-20	Normal
3	Double-Ridged Horn Antenna	R/S	HF907	100357	2018-12-28	Normal
4	Fully-Anechoic Chamber	ETS	11.8m×6.5m ×6.3m	--	2020-08-20	Normal

4 Test Results

4.1 Radiated Emission

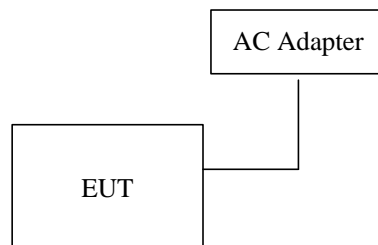
Specifications:	15.109(a)/ ICE-003 Issue 5 §6
Date of Tests	2018-07-03-2017-07-12
Test conditions:	Ambient Temperature:15℃-35℃ Relative Humidity:30%-60% Air pressure: 86-106kPa
Operation Mode	Normal
Test Results:	Pass

Limit Level Construction:

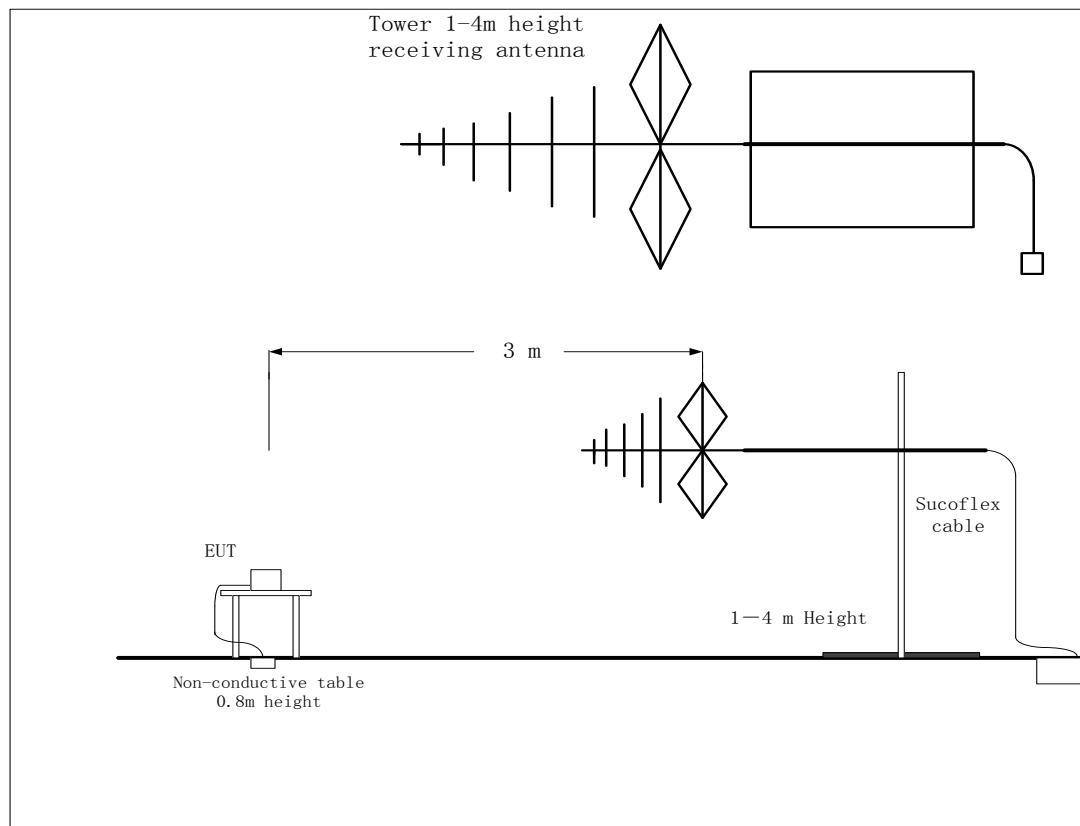
Frequency Range (MHz)	Quasi-Peak (dBuV/m)
30-88	40
88-216	43.5
216-960	46
Above 960	54

Frequency Range (MHz)	Peak (dBuV/m)	Average (dBuV/m)
Above 1000	74	54

EUT Setup:



Test Setup:



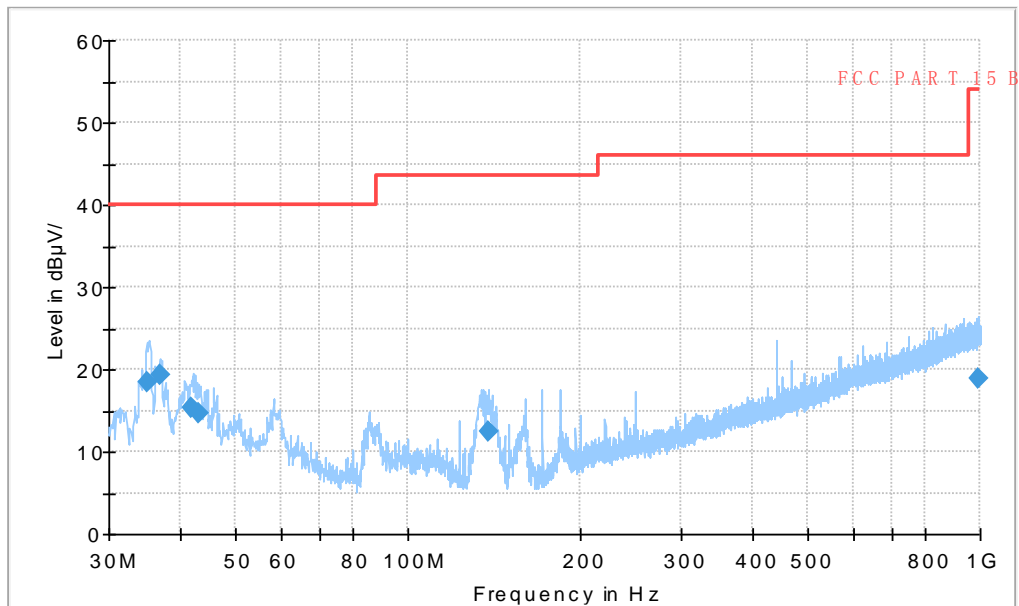
Test Method:

For 30-1000MHz, the EUT was placed on the top of a rotating 0.8-m table above the ground at a semi-anechoic chamber. The distance between the EUT and the received antenna was 3 meters. The table was rotated 360 degree and the received antenna mounted on a variable-height antenna tower was varied from 1m to 4m to find the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna were set during the measurement. Tested in accordance with the procedures of ANSI C63.4-2014, section 8.3.

For 1000-18000MHz, the maximal emission value was acquired by adjusting the antenna height, and the table was rotated 360 degree to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna were set during the measurement.

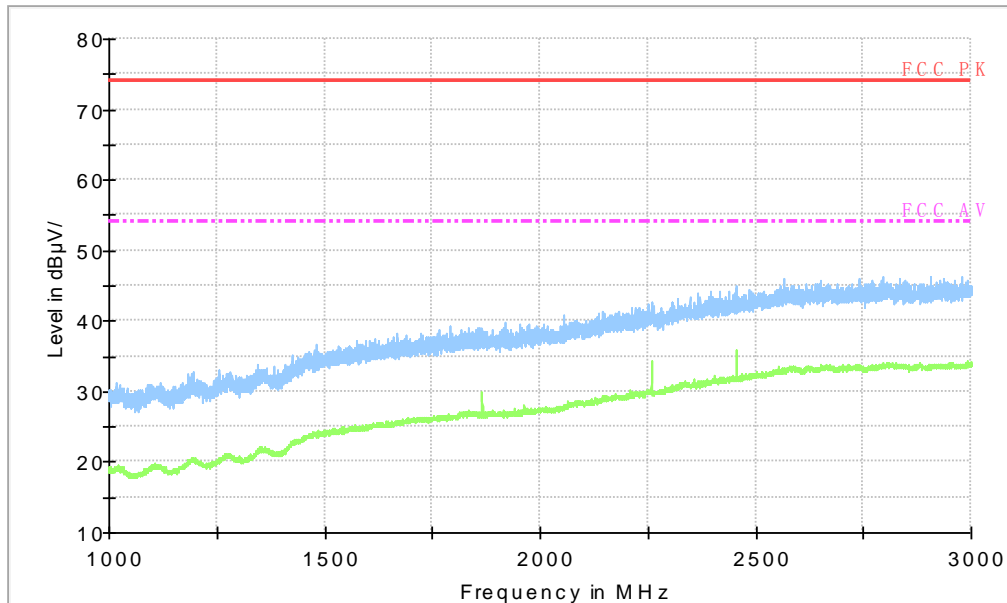
Test Data

RE 30MHz-1GHz

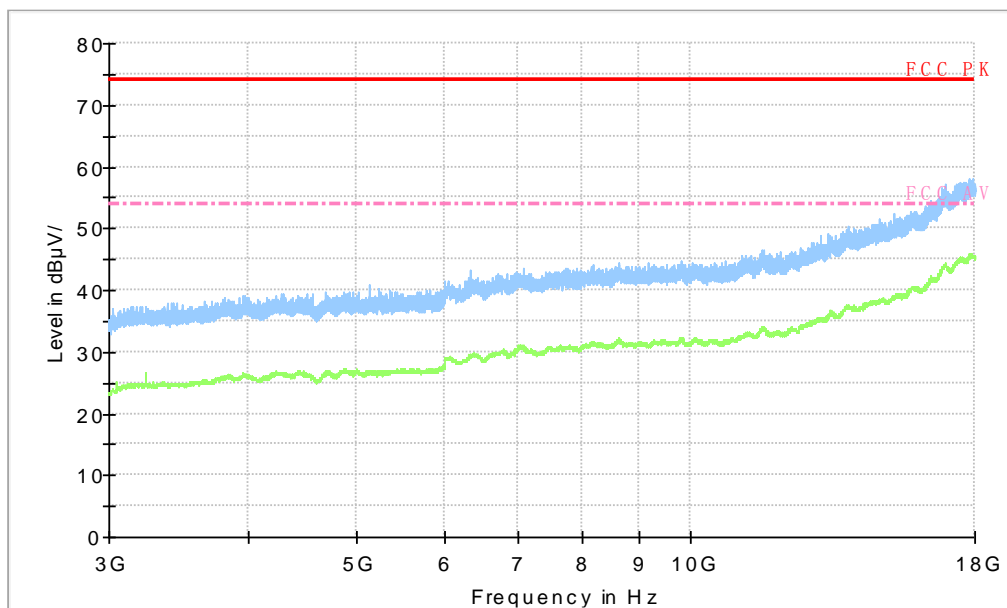


Frequency MHz	QP dBuV/m	Mea.Time ms	RBW KHz	Height cm	Polarity	Azimuth deg	Margin dB	Limit dBuV/m
35.038000	18.5	1000.0	120.0	115.0	V	90.0	21.5	40.0
36.890000	19.3	1000.0	120.0	115.0	V	90.0	20.7	40.0
41.922000	15.4	1000.0	120.0	115.0	V	90.0	24.6	40.0
43.104000	14.7	1000.0	120.0	100.0	V	0.0	25.3	40.0
138.552000	12.4	1000.0	120.0	185.0	H	270.0	31.1	43.5
990.591000	19.0	1000.0	120.0	100.0	V	270.0	35.0	54.0

RE 1GHz-3GHz



RE 3GHz-18GHz



Test photo

See the Pic1~2 in document” SIM7000G_EMC Test Setup Photos”.

Annex A External Photos

See the document” SIM7000G -External Photos”.

Annex B Internal Photos

See the document” SIM7000G-Internal Photos”.

ANNEX C Deviations from Prescribed Test Methods

No deviation from Prescribed Test Methods.

_____ **The End of this Report** _____